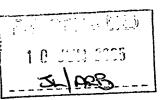
PATENT COOPERATION TREATY

From the INTERNATIONAL PRELIMINARY EXAMINING AUTHORITY

To:

BENNETT, Adrian R.J. A.A. Thornton & CO.

235 High Holborn London WC1V 7LE GRANDE BRETAGNE



PCT

NOTIFICATION OF TRANSMITTAL OF THE INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

(PCT Rule 71.1)

Date of mailing

(day/month/year)

01.06.2005

Priority date (day/month/year)

Applicant's or agent's file reference

JL/ARB/21554

IMPORTANT NOTIFICATION

International application No. PCT/GB2004/001777

International filing date (day/month/year)

30.04.2003

26.04.2004

Applicant

ROCHFORD, Craig et al.

- 1. The applicant is hereby notified that this International Preliminary Examining Authority transmits herewith the international preliminary report on patentability and its annexes, if any, established on the international application.
- 2. A copy of the report and its annexes, if any, is being transmitted to the International Bureau for communication to all the elected Offices.
- 3. Where required by any of the elected Offices, the International Bureau will prepare an English translation of the report (but not of any annexes) and will transmit such translation to those Offices.

4. REMINDER

The applicant must enter the national phase before each elected Office by performing certain acts (filing translations and paying national fees) within 30 months from the priority date (or later in some Offices) (Article 39(1)) (see also the reminder sent by the International Bureau with Form PCT/IB/301).

Where a translation of the international application must be furnished to an elected Office, that translation must contain a translation of any annexes to the international preliminary report on patentability. It is the applicant's responsibility to prepare and furnish such translation directly to each elected Office concerned.

For further details on the applicable time limits and requirements of the elected Offices, see Volume II of the PCT Applicant's Guide.

The applicant's attention is drawn to Article 33(5), which provides that the criteria of novelty, inventive step and industrial applicability described in Article 33(2) to (4) merely serve the purposes of international preliminary examination and that "any Contracting State may apply additional or different criteria for the purposes of deciding whether, in that State, the claimed inventions is patentable or not" (see also Article 27(5)). Such additional criteria may relate, for example, to exemptions from patentability, requirements for enabling disclosure, clarity and support for the claims.

Name and mailing address of the international preliminary examining authority:



European Patent Office D-80298 Munich Tel. +49 89 2399 - 0 Tx: 523656 epmu d Fax: +49 89 2399 - 4465 **Authorized Officer**

Hoogland, J

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PATENT COOPERATION TREATY

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INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

(Chapter II of the Patent Cooperation Treaty)

(PCT Article 36 and Rule 70)

Applicant's or agent's file reference JL/ARB/21554	FOR FURTHER A	ACTION	See Form PCT/IPEA/416	
International application No. PCT/GB2004/001777	International filing date 26.04.2004	e (day/month/year)	Priority date (day/month/year) 30.04.2003	
International Patent Classification (IPC) or national classification and IPC B41J29/02				
Applicant ROCHFORD, Craig et al.				
This report is the internat Authority under Article 35	ional preliminary examination i and transmitted to the applica	eport, established by thi nt according to Article 3	s International Preliminary Examining	
2. This REPORT consists of a total of 6 sheets, including this cover sheet.				
3. This report is also accompanied by ANNEXES, comprising:				
a. 🖾 sent to the applicant and to the International Bureau) a total of 4 sheets, as follows:				
sheets of the description, claims and/or drawings which have been amended and are the basis of this report and/or sheets containing rectifications authorized by this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions).				
☐ sheets which beyond the dis Supplemental	sclosure in the international ap	vhich this Authority cons plication as filed, as indi	iders contain an amendment that goes cated in item 4 of Box No. I and the	
b. (sent to the Internal sequence listing a	ational Bureau only) a total of (computer readable form	er of electronic carrier(s)) , containing a only, as indicated in the Supplemental	
BOX Relating to Se	equence cisting (see Section o	02 of the Administrative	instructions).	
4. This report contains indica	ations relating to the following	items:		
_	f the opinion			
☐ Box No. II Priority				
	_	ard to novelty, inventive	step and industrial applicability	
_	unity of invention	a		
applicat	ed statement under Article 35(bility; citations and explanation	 with regard to novelty s supporting such staten 	, inventive step or industrial nent	
	documents cited	. P P		
_	defects in the international app		. 9	
LI BOX NO. VIII Certain	observations on the internation	nal application		
Date of submission of the demand		Date of completion of this	s report	
28.02.2005		01.06.2005		
Name and mailing address of the international		Authorized Officer	us Paten.	
preliminary examining authority: European Patent Office D-80298 Munich Tel. +49 89 2399 - 0 Tx: 523656 epmu d		Urbaniec, T	Safety Comments of the Safety of Comments of Comment	
Fax: +49 89 2399 - 4465		Telephone No. +49 89 23	399-6079 ************************************	

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No. PCT/GB2004/001777

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_	Box No. I Basis of the repor	t	
1.	. With regard to the language , this report is based on the international application in the language in which it filed, unless otherwise indicated under this item.		
	☐ This report is based on tran which is the language of a	nslations from the original language into the following language , translation furnished for the purposes of:	
	publication of the internal	der Rules 12.3 and 23.1(b)) ational application (under Rule 12.4) examination (under Rules 55.2 and/or 55.3)	
2.	With regard to the elements* of the international application, this report is based on (replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report):		
	Description, Pages		
	1-10	as originally filed	
	Claims, Numbers		
	1-32	received on 02.03.2005 with letter of 28.02.2005	
	Drawings, Sheets		
	1/7-7/7	as originally filed	
	☐ a sequence listing and/or ar	ny related table(s) - see Supplemental Box Relating to Sequence Listing	
3.	☐ The amendments have resu	ulted in the cancellation of:	
	☐ the description, pages☐ the claims, Nos.		
	☐ the drawings, sheets/figs☐ the sequence listing (spe		
	any table(s) related to se		
4.	had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).		
	☐ the description, pages☐ the claims, Nos.		
	☐ the drawings, sheets/figs☐ the sequence listing (spe		
	any table(s) related to se		
	* If item 4 applies, so	ome or all of these sheets may be marked "superseded "	

Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N) Yes: Claims 1-32

No: Claims

Inventive step (IS) Yes: Claims 1-10

No: Claims 11-32

Industrial applicability (IA) Yes: Claims 1-32

No: Claims

2. Citations and explanations (Rule 70.7):

see separate sheet

Re Item V

Reasoned statement with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Reference is made to the following documents:

D1: US-A-6231148

D2: US-A-2001/0024354

2. The document D1 is regarded as being the closest prior art to the subject-matter of claim 1, and shows:

A package (i.e. the casing of a single-time use camera) comprising a container manufactured from a disposable and recyclable material and at least one sheet of paper stored within the interior of the container, characterised in that the container comprises mounting means for allowing a releasable attachment to the container of one or more electrical components for printing onto a sheet of paper stored within the container interior and in that a portion of the container is movable relative to the remainder of the container so as to open an access aperture providing access to the container interior so as to allow for said attachment of a component by use of said mounting means. See col. 3, line 56 to col. 4 line 16 and figures 22-23.

The subject-matter of claim 1 differs from that disclosure in that the package is made of biodegradable material.

The subject-matter of claim 1 is therefore new (Article 33(2) PCT).

3. The problem to be solved by the present invention may be regarded as facilitating the environmentally friendly refill of printing consumables.

The solution to this problem proposed in claim 1 of the present application is considered as involving an inventive step (Article 33(3) PCT) for the following reasons:

The document D1 suggests a recyclable and refillable package which has to be collected and returned to the manufacturer for reconditioning (see col. 16, lines 17-31). Providing a package with a biodegradable container prevents the end user from his involvement

in the burdensome package return procedure. Instead, the emptied package can be disposed of in any location without a harm to the environment. This results in savings in the end user's time and transportation costs. None of the documents cited in the search report addresses this problem.

Claims 2-10 are dependent on claim 1 and as such also meet the requirements of the PCT with respect to novelty and inventive step.

4. The present application does not meet the criteria of Article 33(1) PCT, because the subject-matter of claim 11 does not involve an inventive step in the sense of Article 33(3) PCT.

The document D1 is regarded as being the closest prior art to the subject-matter of claim 11, and discloses "a printer body made from a recyclable material". See in particular the claims 6 and 15 of the document D1.

The subject-matter of claim 11 differs from this disclosure in that the material is biodegradable.

The problem to be solved by the subject-matter of claim 11 may be therefore regarded as facilitating the recycling of valuable parts other than the chassis. See the current application on page 3 of the description, lines 11-17.

However, the solution proposed in claim 11 of the present application cannot be considered as involving an inventive step (Article 33(3) PCT) for the reason that the document D2 explicitly addresses the same problem of recycling electronic appliances (see the paragraph [0040]) and suggests a solution of providing a chassis (i.e. a structural member) made of a biodegradable material.

Dependent claims 12-32 only concern constructional details of certain embodiments of the printer and appear not to contain any features which, in combination with the features of any claim to which they refer, meet the requirements of the PCT in respect of inventive step, see the documents cited above and the corresponding passages cited in the search report.

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY (SEPARATE SHEET)

International application No.

PCT/GB2004/001777

5. Although claims 1 and 11 have been drafted as separate independent claims, they appear to relate effectively to the same subject-matter and to differ from each other only with regard to the scope of the subject-matter for which protection is sought and in respect of the terminology used for the features of that subject-matter. The aforementioned claims therefore lack conciseness and as such do not meet the requirements of Article 6 PCT.

CLAIMS:

- 1. A package of paper comprising a container manufactured from a disposable and biodegradable material; and at least one sheet of paper stored within the interior of the container; characterised in that the container comprises mounting means for allowing a releasable attachment to the container of one or more electrical components for printing onto a sheet of paper stored within the container interior; and in that a portion of the container is movable relative to the remainder of the container so as to open an access aperture providing access to the container interior so as to allow for said attachment of a component by use of said mounting means.
- 2. A package of paper as claimed in Claim 1, wherein the container is manufactured from pulp fibre.
- 3. A package of paper as claimed in Claim 1 or 2, wherein the container comprises a honeycomb construction.
- 4. A package of paper as claimed in any of the preceding claims, wherein an outer surface of the container is covered in a waterproofing material.
- 5. A package of paper as claimed in Claim 4, wherein said waterproofing material completely encapsulates the container.
- 6. A package of paper as claimed in Claim 5, wherein a line of perforations is provided in said waterproofing material adjacent an aperture in the container, said waterproofing material covering said aperture and said line of weakness extending around said aperture so as to provide said portion of the container movable relative to the remainder of the container.
- 7. A package of paper as claimed in any of the preceding claims, wherein said mounting means comprises a resilient snap lock clip.

- 8. A package of paper as claimed in any of the preceding claims, wherein said mounting means comprises means for mounting a motor to the container.
- 9. A package of paper as claimed in Claim 8, wherein said means for mounting a motor comprises a rail slider upon which a motor may be located and slid into a use position.
- 10. A package of paper as claimed in any of the preceding claims, wherein an electrical connector is mounted on the container so as to receive and electrically connect with a further electrical connector mounted on a motor housing located in a use position relative to the container.
- 11. A printer chassis manufactured from a disposable and biodegradable material.
- 12. A printer chassis as claimed in Claim 11, wherein the chassis is manufactured from pulp fibre.
- 13. A printer chassis as claimed in Claim 11 or 12, wherein the chassis comprises a honeycomb construction.
- 14. A printer chassis as claimed in any of the preceding claims, wherein an outer surface of the chassis is covered in a waterproofing material.
- 15. A printer chassis as claimed in Claim 14, wherein said waterproofing material completely encapsulates the chassis.
- 16. A printer chassis as claimed in Claim 15, wherein a line of perforations is provided in said waterproofing material adjacent an aperture in the chassis, a portion of said waterproofing material covering said aperture and said line of weakness extending around said aperture so as to allow ready removal of said portion of material.
- 17. A printer chassis as claimed in any of Claims 14 to 16, wherein said waterproofing material is bonded to the chassis.





- 18. A printer chassis as claimed in any of Claims 14 to 17, wherein said waterproofing material is wax paper.
- 19. A printer chassis as claimed in any of the preceding claims, further comprising means for mounting on the chassis a motor for driving relative movement between a printer head and paper to be printed.
- 20. A printer chassis as claimed in Claim 19, wherein said means for mounting a motor comprises means for releasably securing a motor to the chassis.
- 21. A printer chassis as claimed in Claim 20, wherein said releaseable securing means comprises a resilient snap lock clip.
- 22. A printer chassis as claimed in any of Claims 19 to 21, wherein said means for mounting a motor comprises a rail slider upon which, in use, a motor may be located and slid into a use position.
- 23. A printer chassis as claimed in any of the preceding claims, wherein an electrical connector is mounted on the chassis so as to receive and electrically connect with a further electrical connector mounted on a motor housing located in a use position relative to the chassis, the printer further comprising a printer head electrically connected to said chassis mounted electrical connector.
- 24. A printer chassis as claimed in any of the preceding claims, further comprising means for mounting on the chassis a printer head.
- 25. A printer chassis as claimed in Claim 24, wherein said means for mounting a printer head comprises means for releaseably securing a printer head to the chassis.
- 26. A printer chassis as claimed in Claim 25, wherein said releaseable securing means comprises a resilient snap lock clip.
- 27. A printer chassis as claimed in any of the preceding claims, further comprising a printer head.









- 28. A printer chassis as claimed in any of the preceding claims, further comprising means for mounting on the chassis a scanner head for scanning documents.
- 29. A printer assembly comprising a chassis as claimed in any of the preceding claims, further comprising at least one sheet of paper to be printed, said paper being located within the chassis.
- 30. A printer assembly as claimed in Claim 29, comprising between 50 and 150 sheets of paper.
- 31. A printer comprising a chassis as claimed in any of Claims 11 to 28.
- 32. A printer comprising a printer assembly as claimed in Claim 29 or 30.